

**IN THE CLAIMS:**

Please amend the claims as follows:

Claims 1-23 (Cancelled).

24. (Previously Presented) The microfluidic device of claim 26 wherein the trigger includes a hydrogel post, the hydrogel post changing configuration in response to exposure to a predetermined condition in the physiological fluids.

Claim 25 (Cancelled)

26. (Previously Presented) A microfluidic device for delivering a drug to an individual, comprising:

- a body defining a reservoir for receiving the drug;
- an output needle having an input in communication with the reservoir and an output receivable within the individual;
- an adhesive for affixing the body to the individual;
- a pressure source including an hydrogel member expandable in response to exposure to a predetermined physical property, the hydrogel member engageable with the reservoir and urging the drug from the reservoir through the output needle as the hydrogel member expands; and
- a valve defining a chamber and interconnecting the reservoir and the output needle, the valve movable between a non-actuated position wherein the valve prevents the flow of the drug from the reservoir to the output needle and an actuated position wherein the valve allows for the flow of the drug from the reservoir to the output needle, the valve including:
  - a flexible membrane for dividing the valve chamber into a drug flow portion and a trigger receiving portion; and
  - a trigger positioned within the trigger receiving portion of the valve chamber and having a first configuration with the valve in the non-actuated position and a second configuration with the valve in the actuated position; and
  - a first sensing needle having an input receivable in the individual and an output within the trigger receiving portion of the valve chamber, the first sensing needle allowing

physiological fluids to pass from the individual to the trigger receiving portion of the valve chamber.

Claims 27-30 (Cancelled)